

AMENDMENTS TO THE CLAIMS

Claims 1-5 (Previously Canceled)

Claim 6 (Currently Amended) A needle-like member that constitutes a conductive contact which electrically connects a first object to a second object, the needle-like member comprising:

a columnar member having

a first end and a second end;

a through hole extending entirely through the columnar member from the first end to the second end to form openings in said first end and in said second end;
[[and]]

a contact member integrally formed on the first end of the columnar member and configured to electrically contact with the first object; and

a spring member that surrounds an outer surface of the columnar member and applies an elastic force on an other needle-like member present in the through hole,

wherein the through hole has hole portions with different inner diameters, and
wherein one hole portion has such an inner diameter and a length that an
electrical contact resistance can be maintained constant between the one hole portion
and the other needle-like member, and inner diameters of other hole portions are larger
than the inner diameter of the one hole portion.

Claim 7 (Previously Presented) The needle-like member according to claim 6, wherein the second object is a circuit that generates and transmits an electrical signal to be supplied to the first object.

Claim 8 (Previously Presented) The needle-like member according to claim 6, wherein the second object is a circuit board that includes a circuit for generating and transmitting an electrical signal to be supplied to the first object.

Claims 9-10 (Previously Canceled)

Claim 11 (Previously Presented) The needle-like member according to claim 6, wherein the contact member is located near a periphery of the columnar member in a longitudinal direction to come in contact with a periphery of a connecting electrode of the first object.

Claim 12 (Currently Amended) A conductive contact that electrically connects a first object to a second object, the conductive contact comprising:

a first needle-like member that included a columnar member having

a first end and a second end;

a through hole extending entirely through the columnar member from the first end to the second end to form openings in said first end and in said second end; and

a contact member configured to electrically contact with the first object and arranged at the first end; and

a second needle-like member that is arranged to electrically connect to the first needle-like member, and including a support member having a sliding portion that is slidable in the longitudinal direction while being in contact with an inner surface of the through hole such that the entire sliding portion has a constant diameter; and

a spring member that is fixed to the first needle-like member and surrounds an outer surface of the columnar member, and applies an elastic force on the second needle-like member present in the through hole,

wherein the through hole has hole portions with different inner diameters, and

wherein one hole portion has such an inner diameter and a length that an electrical contact resistance can be maintained constant between the one hole portion and the second needle-like member, and inner diameters of other hole portions are larger than the inner diameter of the one hole portion.

Claim 13 (Previously Presented) The conductive contact according to claim 12, wherein the second object is a circuit that generates and transmits an electrical signal to be supplied to the first object.

Claim 14 (Previously Presented) The conductive contact according to claim 12, wherein the second object is a circuit board that includes a circuit for generating and transmitting an electrical signal to be supplied to the first object.

Claim 15 (Canceled)

Claim 16 (Canceled)

Claim 17 (Previously Presented) The conductive contact according to claim 12, wherein the second needle-like member also includes a contact member that is integrally formed with the support member, and configured to electrically contact with the second object.

Claim 18 (Currently Amended) A conductive contact unit comprising:
a conductive contact which electrically connects a first object to a second object, including

a needle-like member that includes a columnar member having a first end and a second end, a through hole extending entirely through the columnar member from the first end to the second end to form openings in said first end and in said second end, and a contact member configured to electrically contact with an object; and

a spring member surrounding an outer surface of the columnar member that biases the needle-like member in a direction perpendicular to the object; and

a conductive contact holder that includes a holder hole for accommodating the conductive contact,

wherein the through hole has hole portions with different inner diameters, and wherein one hole portion has such an inner diameter and a length that an electrical contact resistance can be maintained constant between the first object and the second object, and inner diameters of other hole portions are larger than the inner diameter of the one hole portion.

Claim 19 (Previously Presented) The conductive contact unit according to claim

18, further comprising a circuit that generates and transmits an electrical signal to be supplied to the object.

Claim 20 (Previously Presented) The conductive contact unit according to claim 18, further comprising a circuit board that includes a circuit for generating and transmitting an electrical signal to be supplied to the object.

Claim 21 (Canceled)

Claim 22 (Canceled)

Claim 23. (Currently Amended) A needle-like member that constitutes a conductive contact which electrically connects a first object to a second object, the needle-like member comprising:

a columnar member having a first end and a second end, and a through hole that extends entirely through the columnar member from the first end to the second end to form openings in said first end and in said second end; and

a contact member integrally formed on the first end of the columnar member and configured to electrically contact with the first object,

wherein the through hole has hole portions with different inner diameters, and
wherein one hole portion has such an inner diameter and a length that an
electrical contact resistance can be maintained constant between the first object and
the second object, and inner diameters of other hole portions are larger than the inner
diameter of the hone hole portion.

Claim 24 (Previously Presented) The needle-like member according to claim 23, wherein the second object is a circuit that generates and transmits an electrical signal to be supplied to the first object.

Claim 25 (Previously Presented) The needle-like member according to claim 23, wherein the second object is a circuit board that includes a circuit for generating and transmitting an electrical signal to be supplied to the first object.

Claim 26 (Canceled)

Claim 27 (Canceled)

Claim 28 (Previously Presented) The needle-like member according to claim 23, wherein the contact member is located near a periphery of the columnar member in a longitudinal direction to come in contact with a periphery of a connecting electrode of the first object.